

cessed area 86 is therefore also generally bounded by two parallel straight side edges 94, 96 of the planar ply 32.

Referring to FIGS. 8 and 9, it may be seen that because the side walls 88, 90 each traverse the generally concave arcuate path, the top edges of each side wall 88, 90 adjacent to the straight side edges 94, 96 bounding the concave recessed area 86 are preferably disposed at the point where the planar ply 32 would meet the convoluted intermediate ply 34 as the double-faced corrugated plastic sheet material 28 is normally constructed, thereby providing the side walls 88, 90 with their maximum height at points most proximate to the straight side edges 94, 96 and disposed on opposing sides of the generally concave recessed area 86. Conversely, due to the generally concave arcuate path, the top edges of each side wall 88, 90 adjacent to the centerline C of the concave recessed area 86 are preferably disposed near to the point where the convoluted intermediate ply 34 would meet the planar ply 30, thereby providing the side walls 88, 90 with their minimum height at a point closely proximate to the centerline C of the generally concave recessed area 86. As the height of the side walls 88, 90 decreases, the resistance of the corrugated plastic sheet material 28 to bending against the grain of the convoluted intermediate ply 34 will diminish. Consequently, when the two sides of the top panel 64 are bent or flexed as shown in FIG. 9, the top panel 64 will automatically provide a straight and uniform bend or fold along a line defined by the lowest heights of each of the side walls 88, 90 for each of the air passages 36, which are preferably aligned along the centerline C of the generally concave recessed area 86.

Referring to FIGS. 3 and 14, it may be seen that the single top panel 64 may include two or more scored fold lines 98 which allow the top panel 64 to conform to a gentle curvature rather than strictly an angle when folded, and which permit the roof ventilator 10 to be completely folded into a compact bundle as shown in FIG. 14.

In operation, the roof ventilator 10 is folded from a flat blank 38 as shown in FIGS. 4-6 or 15 to a partially folded position as shown in FIG. 3, and to a completely folded operative configuration as shown in FIGS. 1 and 2. The top panel 64 of the roof ventilator 10 may be selectively bent or flexed, and will responsively fold along the centerline C and conform to the pitch of the roof 16. The roof ventilator 10 may then be attached to the roof 16 using nails or similar fasteners, and covered with shingles or tiles as desired. Air ventilated from within an attic beneath the roof 16 will pass upwardly through the opening 14 and into the interior region 76 of the roof ventilator 10. The air will then pass through the air passages 36, through the columnar pockets 74, and to the exterior surrounding the roof ventilator 10. Air may also pass through the oval-shaped openings 92 of the generally concave recessed area 86, and through the air passages 36 of the top panel 64. Precipitation driven through the air passages 36 from the exterior by strong winds, or drawn through the air passages 36 by capillary action, will be impeded or stopped by the barrier pockets 74.

While the preferred embodiment of the above ridge cap roof ventilator 10 has been described in detail above with reference to the attached drawing figures, it is understood that various changes and adaptations may be made in the roof ventilator 10 without departing from the spirit and scope of the appended claims.

What is claimed is:

1. In a roof ventilator for mounting on a peak of a roof having a roof opening, said roof ventilator having a pair of vent parts disposed on opposing sides of said roof opening and defining a multiplicity of air passages communicating with said roof opening, each said vent part including a plurality of vent panels which are interconnected and generally parallel to one another and disposed in a stack generally proximate to one another, said plurality of vent panels defining said multiplicity of air passages, the improvement comprising:

a first aperture defined by and extending completely through a first one of the plurality of vent panels and interrupting at least a portion of the multiplicity of air passages therein; and

a second aperture defined by and extending completely through a second one of the plurality of vent panels and interrupting at least a portion of the multiplicity of air passages therein, such that said first aperture and said second aperture are generally aligned with and overlap at least a portion of one another.

2. The roof ventilator of claim 1 wherein the number of vent panels in each of the pair of vent parts is at least three, said roof ventilator further comprising:

a third aperture defined by and extending through a third one of the plurality of vent panels and interrupting at least a portion of the multiplicity of air passages therein, such that said third aperture is generally aligned with and overlaps at least a portion of the first aperture and the second aperture.

3. The roof ventilator of claim 2 wherein the number of vent panels in each of the pair of vent parts is at least four, said roof ventilator further comprising:

a fourth aperture defined by and extending through a fourth one of the plurality of vent panels and interrupting at least a portion of the multiplicity of air passages therein, such that said fourth aperture is generally aligned with and overlaps at least a portion of the first aperture, the second aperture, and the third aperture.

4. In a roof ventilator for mounting on a peak of a roof having a roof opening, said roof ventilator having a pair of vent parts disposed on opposing sides of said roof opening and each defining a multiplicity of air passages communicating with said roof opening, said pair of vent parts being connected to one another by a top panel, each of said pair of vent parts including at least a first vent panel and a second vent panel connected to said first vent panel such that said first vent panel is disposed above said second vent panel generally parallel thereto to form a stack, said first vent panel and said second vent panel defining said multiplicity of air passages, the improvement comprising:

at least one first aperture defined by and extending through the first vent panel and interrupting at least a portion of the multiplicity of air passages; and

at least one second aperture defined by and extending through the second vent panel and interrupting at least a portion of the multiplicity of air passages, such that said first aperture and said second aperture are generally aligned with and overlap one another.

5. The roof ventilator of claim 4 wherein each of the pair of vent parts includes a third vent panel, said roof ventilator further comprising:

a third aperture defined by and extending through the third vent panel and interrupting at least a portion of the multiplicity of air passages, such that said third aperture is generally aligned with and overlaps at least a portion of the first aperture and the second aperture.]

[6. The roof ventilator of claim 5 wherein each of the pair of vent parts includes a fourth vent panel, said roof ventilator further comprising:

a fourth aperture defined by and extending through the fourth vent panel and interrupting at least a portion of the multiplicity of air passages, such that said fourth aperture is generally aligned with and overlaps at least a portion of the first aperture, the second aperture, and the third aperture.]

[7. In a roof ventilator for mounting on a peak of a roof having a roof opening, said roof ventilator having a pair of vent parts disposed on opposing sides of said roof opening and each defining a multiplicity of air passages communicating with said roof opening, said pair of vent parts being connected to one another by a top panel, each of said pair of vent parts including a plurality of vent panels which are interconnected and generally parallel to one another and disposed in a stack generally proximate to one another, said plurality of interconnected vent panels defining said multiplicity of air passages, the improvement comprising:

a plurality of apertures, said plurality of apertures each being defined by and extending through the plurality of vent panels in a one of the pair of vent parts and interrupting at least a portion of the multiplicity of air passages therein, such that each of said plurality of apertures are generally aligned with and overlap one another within said one of the pair of vent parts.]

[8. In a roof ventilator for mounting on a peak of a roof having a roof opening, said roof ventilator having a pair of vent parts disposed on opposing sides of said roof opening and defining a multiplicity of air passages communicating with said roof opening, said pair of vent parts being connected to one another by a top panel disposed above said pair of vent parts, said roof ventilator defining an interior region and an exterior region surrounding said roof ventilator, the improvement comprising:

a pocket defined by and extending at least partially through at least a one of the vent parts in a direction generally perpendicular to the top panel and disposed beneath the top panel, said pocket being disposed between the interior region of the roof ventilator and the exterior region surrounding the roof ventilator and interrupting a portion of the multiplicity of air passages, said pocket being at least partially enclosed along a first side disposed closest to the interior region of the roof ventilator by said one of the vent parts and communicating therealong with said portion of the multiplicity of air passages, said pocket being at least partially enclosed along a second side disposed closest to the exterior region surrounding the roof ventilator by said one of the vent parts and communicating therealong with said portion of the multiplicity of air passages said pocket being spaced apart from the interior region by the vent part.]

[9. In a roof ventilator for mounting on a peak of a roof having a roof opening, said roof ventilator having a pair of vent parts disposed on opposing sides of said roof opening and a top panel disposed above said pair of vent parts, said top panel being constructed of a double-

faced corrugated sheet material having a pair of planar plies spaced apart a distance and an intermediate ply, said intermediate ply having a multiplicity of convolutions and being disposed between and connected to each of said pair of planar plies to define a longitudinal grain and a multiplicity of partially enclosed air passages extending therethrough parallel with said longitudinal grain, said roof ventilator defining an interior region and an exterior region surrounding said roof ventilator, said top panel having an underside defined by a one of the pair of planar plies communicating with and proximate to said interior region, the improvement comprising:

a recessed area cut in and extending at least partially into the underside of the top panel, said recessed area extending through the one of the pair of planar plies defining the underside of the top panel and at least partially through the intermediate ply, said recessed area defining a plurality of openings, each of said openings communicating with a one of the multiplicity of air passages such that air may pass from the interior region of the roof ventilator through said plurality of openings defined by said recessed area into the multiplicity of air passages and to the exterior surrounding the roof ventilator, each of said plurality of openings having a pair of side walls defined by the intermediate ply, each of said pair of side walls traversing a generally oval-shaped path, such that the top panel may be manually folded across a path disposed within said recessed area.]

[10. The roof ventilator of claim 9 wherein each of the pair of side walls traverses a generally concave arcuate path.]

[11. The roof ventilator of claim 9 wherein the recessed area extends entirely through the one of the pair of planar plies defining the underside of the top panel, the one of the pair of planar plies thereby defining a pair of side edges bounding the recessed area, each of the pair of side walls having a maximum height measured adjacent to said side edges bounding the recessed area, and a minimum height measured at a point disposed between said pair of side edges bounding the recessed area.]

[12. The roof ventilator of claim 11 wherein each of the pair of said edges bounding the recessed area are generally straight.]

[13. The roof ventilator of claim 11 wherein the recessed area defines a centerline disposed approximately equidistant between the pair of side edges bounding the recessed area, and wherein the point at which the minimum height of each of the pair of side walls is measured is closely proximate to said centerline.]

[14. The roof ventilator of claim 13 wherein each of the pair of said walls has a top edge, each said top edge being disposed proximate to the one of the pair of planar plies defining the underside of the top panel adjacent to each of the pair of side edges bounding the recessed area, and wherein each said top edge is disposed closely proximate to a remaining one of the pair of planar plies adjacent to the centerline.]

[15. The roof ventilator of claim 11 wherein the top panel may be selectively bent, the top panel folding generally along a line defined by and connecting each of the side walls of the recessed area at the point at which the minimum height of each of the side walls is measured responsive to the top panel being bent.]

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